by ſuch materials: yet a horſe may take the greater number of boats, in order to make up a weight equal to his ſtrength.

Conſidering the articles enumerated, and deliberating on the ſize, and weight, of other commodities, I conceive there are few things excluded; and the queſtion is, Whether a company ſhould expend one hundred thouſand pounds inſtead of fifty thouſand? Thereby ſinking two thouſand five hundred pounds per annum, in order to accommodate the few things which boats of theſe dimenſions cannot contain, when, in all probability, the articles accommodated would not in tonnage produce 100l. per annum.

Thus ſeeing that moſt things may be conveyed in ſmall boats, and ſmall boats diminiſh the expence of canals; the next thing to be conſidered is how to paſs them to, and from, the different levels, or ponds, of which the canals conſiſt. To perform this, ſee the annexed Plates of Machines. But firſt give me leave to premiſe the objects in view:

The *firſt* object is, to conſtruct ſuch cheap navigations as may extend into diſtricts which produce but a ſmall trade: to perform this, I find it indiſpenſably neceſſary to reduce the boats to ſmall dimenſions.

The *ſecond* object is, as the trade may increaſe, and become of conſequence, it is prudent to provide againſt ſuch an event, as it will then be neceſſary to perform an important trade on a ſmall and cheap canal. For this purpoſe; if we reflect that the boats may be multiplied as the trade increaſes, and that the canal may be full of ſuch boats from one extremity to the other; conſequently the canal, and boats, are adequate to any quantity of trade which the moſt ſanguine imagination can conceive.

But

But, the principal conſideration is, how to prevent ſtagnation at the machinery; hence it becomes neceſſary to conſtruct the apparatus in ſuch a manner that the boats may paſs with the greateſt poſſible expedition; and this quick transfer is the more neceſſary, in conſequence of dividing the trade into ſmall portions of four tons, each of which muſt paſs ſeparate. Succeſs in theſe objects will conſequently produce ſyſtem; for, as the canal, though ſmall, and ſuited to a ſmall trade, is alſo adequate to a trade of the firſt importance, it will be impolitic to form any other than cheap and ſmall navigations; hence the boats of one may navigate the other, wherever canals extend.

A third object is, by forming them cheap, and ſuited to diſtricts with a ſmall trade, it will be the greateſt poſſible inducement to conſtruct them. The ſubſcriber feeling himſelf guarded againſt any material loſs, with every advantage which a larger work could give *; theſe circumſtances may juſtly be expected to extend them through the remote parts of the country, open its numerous reſources, and ſpread the produce in every direction. Whether I have ſucceeded in theſe points, the candid reader will determine.

* Locks are attended with a certain and heavy expence, whatever the trade may chance to be.

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